

**REMARKS**

A Petition for Extension of Time is being concurrently filed with this Amendment. Thus, this Amendment is being timely filed.

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the Abstract and claims and the following remarks.

***Status of the Claims***

In the present Reply, claims 1, 2, 3, 5, 6, 10 and 11 have been amended. Also, claims 4 and 7-9 are withdrawn from consideration. Further, claims 12-14 have been added. Thus, claims 1-14 are pending in the present application.

No new matter has been added by way of these amendments because each amendment is supported by the present specification. For example, the amendment to claim 1 at least at page 12, lines 16+ of the present specification and is otherwise editorial in nature. The amendments to claims 2, 3, 6, 10 and 11 are clarifying in nature and not narrowing in scope. By deleting/amending these terms in order to clarify the claimed invention (e.g., "A" to "The"), Applicants in no way are conceding any limitations with respect to the interpretation of the claims under the Doctrine of Equivalents. Claim 5 has been amended into independent form by incorporating the subject matter of base claim 1.

New claims 12-13 are the same or similar to claim 1 except the new claim is directed to the allowable subject matter (see paragraph 21, page 16 of the Office Action). For claims 14-16, please see the specification at page 9, third full paragraph. New claims 17-18 are similar to claims 5 and 6, respectively, except the new claims are directed to SEQ. ID. NO.:2. Finally, new

claims 19-21 are similar to claim 1 and are directed to the protein (b), and have further support in the present specification at page 6, lines 3-9. Thus, no new matter has been added. Applicants add that the new claims fall within the elected subject matter.

No new matter has been added with the amendment to the Abstract. The Abstract has been amended to be one paragraph.

Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all objections and rejections and allow the currently pending claims.

***Abstract***

The Abstract is objected to as stated in paragraph 2, page 3 of the outstanding Office Action. Applicants respectfully request reconsideration and withdrawal of this objection in view of the amendment herein.

***Claim Objection***

Claim 2 is objected to as stated in paragraph 7, page 4 of the outstanding Office Action. Applicants respectfully request reconsideration and withdrawal of this objection in view of the amendment to claim 2 as shown herein.

***Issues under 35 U.S.C. § 112, Second Paragraph***

Claims 1-3, 5-6 and 10-11 stand rejected under 35 U.S.C. § 112, second paragraph, for

asserted lack of definiteness (see paragraphs 8-13 of the Office Action). Applicants respectfully traverse, and reconsideration and withdrawal of this rejection are respectfully requested.

Regarding paragraphs 10-13 of the Office Action, Applicants respectfully refer the Examiner to the disputed claims as presented herein.

Also regarding paragraph 12 of the Office Action and the Examiner's comments on the nucleotide sequence encoding a single amino acid, Applicants respectfully refer the Examiner to the present specification at page 8, lines 18-21 and page 12, lines 16-23 which refers to a mutant SCDH gene, wherein the codon of the nucleotide sequence may vary but still code for valine at position 75 of the amino acid sequence. Applicants also provide the following explanation.

The kit of claim 10 is to determine whether a rice blast fungus of interest has a resistance to a scytalone dehydratase inhibitor. In the claimed kit, the kind of amino acid at position 75 of a mutant SCDH derived from the fungus of interest is an identifier. In other words, the resistance to a scytalone dchhydratase inhibitor depends on the type of amino acid at the position 75 of a mutant SCDH. Thus, the kit of claim 10 only has to identify the amino acid at position 75. The nucleotide sequence in claim 10 need not code for the entire amino acid sequence of a mutant SCDH derived from the fungus of interest. One of skill in the art understands that the metes and bounds of the kit of pending claim 10 and this claim fully complies with 35 U.S.C. § 112, ¶ 2.

Therefore, it is believed that these issues are adequately addressed. Reconsideration and withdrawal of this rejection are respectfully requested.

***Issues under 35 U.S.C. § 101***

Claims 1-3 stand rejected under 35 U.S.C. § 101 as stated in paragraphs 14-15 of the

Office Action. Applicants respectfully traverse, and reconsideration and withdrawal of this rejection are respectfully requested.

Applicants respectfully refer the Examiner to claim 1 as presented herein, wherein the term "isolated or purified" appears in the preamble. Thus, this rejection has been overcome. Withdrawal of this rejection is respectfully requested.

***Issues under 35 U.S.C. § 112, First Paragraph***

Claims 1-3, 5-6 and 10-11 stand rejected under 35 U.S.C. § 112, first paragraph, for asserted lack of written description and lack of enablement (see paragraphs 16-18 of the Office Action). Applicants respectfully traverse, and reconsideration and withdrawal of these rejections are respectfully requested.

The Examiner has issued these rejections in view of the broad interpretation of the pending claims (see, e.g., page 7, second full paragraph under paragraph 17 of the Office Action). Accordingly, reconsideration and withdrawal of both rejections are respectfully requested in view of the claim amendments and above remarks. As recited in claim 1, the present invention requires that the amino acid at position 75 is methionine and that the protein has scytalone dehydratase activity in the presence of a scytalone dehydratase inhibitor. Again, the resistance to a scytalone dehydratase inhibitor depends on the type of amino acid at the position 75 of a mutant SCDH. Thus, the present invention is not directed to a nucleic acid encoding just any scytalone dehydratase; kits comprising primers having any structure, etc.

Regarding the written description rejection, "The 'written description' requirement implements the principle that a patent must describe the technology that is sought to be patented;

the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed." *Capon v. Eshhar*, 418 F.3d 1349, 1357, 76 USPQ2d 1078, 1084 (Fed. Cir. 2005). It is believed that one of skill in the art understands that the present inventors had possession of the claimed invention in that sufficient technologic knowledge, including what is disclosed in the present specification and the state of the art, is imparted to the skilled artisan.

Regarding the enablement rejection, that some experimentation is necessary does not preclude enablement unless the amount of experimentation is unduly extensive. *In re Wright*, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993). It is believed that only some and not undue experimentation is involved in making and using the present invention.

Reconsideration and withdrawal of these rejections are respectfully requested.

***Issues under 35 U.S.C. § 102(b)***

Claims 1-3, 5-6 and 10-11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Motoyama *et al.* (*Biosci. Biotechnol. Biochem.*, Vol. 62(3), pp. 564-566 (1998) (see paragraphs 19-20 of the Office Action). Applicants respectfully traverse and reconsideration is respectfully requested.

Again, the Examiner has issued this rejection in view of the broad interpretation of the pending claims (see, e.g., page 15, second full paragraph of the Office Action). Accordingly, reconsideration and withdrawal of this rejection is respectfully requested in view of the claim amendments presented herein and above remarks. The resistance to a scytalone dehydratase

inhibitor depends on the type of amino acid at the position 75 of a mutant SCDH.

Reconsideration and withdrawal of this rejection are respectfully requested.

### *Conclusion*

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

Applicants also request separate consideration of claims 12-21.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/507,132

Art Unit 1652

Reply to Office Action of February 12, 2007

Docket No.: 1254-0258PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: August 7, 2007 ✓

Respectfully submitted,

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Attachment: Abstract (clean version)